II. Amendments to the Claims:

This listing will replace all prior versions and listings, of claims in the application:

1. (currently amended) A welding method comprising the steps of:

causing a welding current to flow between a workpiece and an welding electrode, said welding current having a waveform including a periodic repetition of a cycle consisting of an AC current portion during which an AC current is supplied and a DC current portion following the AC current during which a DC current is supplied, said AC current portion consisting of a positive polarity portion of a given time period during which said current is positive, and a negative portion of said given time period during which said current is negative; and

inserting at least one current pulse of polarity opposite to the polarity of said DC current during said DC current portion, said opposite polarity pulse having a time period shorter than said given time period of said positive and negative polarity portions;

2. (original) The welding method according to Claim 1 wherein said at least one current pulse comprises a plurality of regularly spaced pulses.

3. (original) The welding method according to Claim 1 wherein said at least one current pulse comprises a plurality of pulses with at least one of said pulses spaced from other pulses by a different amount.

4. (currently amended) A power supply apparatus for use in welding, comprising:

a DC power supply having positive and negative terminals and being adapted to supply a welding load including a welding electrode and a workpiece with a positive current from said positive terminal and with a negative current from said negative terminal;

a first semiconductor switching device operative to intermittently interrupt the current supplied from said positive terminal to said welding load;

a second semiconductor switching device operative to intermittently interrupt the current supplied from said negative terminal to said welding load; and

control means for controlling the ON-OFF operation of said first and second semiconductor switching devices;

wherein said control means operates to control said first and second semiconductor switching devices in such a manner as to provide a repetition of a cycle consisting of an AC period during which said first and second semiconductor switching devices are alternately rendered conductive for a given time period, and a positive DC period following said AC period during which said first semiconductor switching device is rendered continuously conductive; and

said control means forms a negative pulse period in said positive DC period by ~~simultaneously~~ rendering said first and second semiconductor switching devices nonconductive and conductive, respectively, at least once ~~during said positive DC period, and, thereafter, simultaneously rendering said first and second semiconductor switching devices conductive and nonconductive, respectively~~ during said DC period for a time period shorter than said given time period.

5. (original) The power supply apparatus according to Claim 4 wherein a plurality of such negative pulse periods are disposed at regular intervals.

6. (original) The power supply apparatus according to Claim 4 wherein a plurality of such negative pulse periods are disposed with at least one of said negative pulse periods spaced from other negative pulse periods by a different amount.

7. (original) The power apparatus according to Claim 4 further comprising:

a first reactor connected between said positive terminal and said first semiconductor switching device; and

a second reactor connected between said negative terminal and said second semiconductor switching device;

said first and second reactors being wound on a same core in such a manner that voltages of opposite polarities can be induced therein.